



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Finklestein, S. et al.

Application No: 10/605,456

Filed: September 30, 2003

For: *Promoting Recovery from Damage to
the Central Nervous System*

Examiner: Not Yet Assigned

Art Unit: 1632

Confirmation No.: 2455

Attorney Document No. CBA-003.02

CERTIFICATE OF FIRST CLASS MAILING

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Shirine Darvish

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. § 1.97(b)(3)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The above-referenced application is a continuation of USSN 09/642,277, which was filed on August 18, 2000. Accordingly, Applicants request that all documents made of record in USSN 09/642,277 be made of record in the above-referenced application. Copies are submitted herewith of Forms PTO 1449 filed May 14, 2001 and January 10, 2003.

In accordance with 37 CFR 1.98(d)(2), no copies of the references cited in these Forms PTO 1449 are enclosed herewith, because the Information Disclosure Statements filed in USSN 09/642,277 complied with 37 CFR 1.98 sections (a) through (c).

In addition, a further Form PTO/SB/08a is filed listing references cited by the Examiner in USSN 09/642,277. Copies of the documents are not submitted because they were all made of record in USSN 09/642,277.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached Form PTO/SB/08a.

This submission does not represent that a search has been made or that no better art exists. Nor does it constitute an admission that the listed documents are material or constitute "prior art." If the Examiner applies the cited documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of said document. Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the cited references be applied against the claims of the present application.

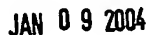
This Information Disclosure Statement is being filed before the mailing of a first Office Action on the merits; therefore, no fees are due. However, the Commissioner is authorized to credit any overpayment or charge any deficiencies to/from our Deposit Account, No. 06-1448.

Respectfully submitted,
FOLEY HOAG LLP

By: 

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Substitute for form 1449A/PTO

(Use as many sheets as necessary)

Sheet	1	of	2
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Complete if Known

<i>Application Number</i>	10/605,456
<i>Filing Date</i>	September 30, 2003
<i>First Named Inventor</i>	Finklestein, Seth
<i>Art Unit</i>	1632
<i>Examiner Name</i>	Not Yet Known
<i>Attorney Docket Number</i>	CBA-003.02

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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
	N	FR 2 642 086	07-1990	Caput et al.		
	O	WO 00/71715	11-2000	Rosen et al.		
	P	EP 86117257.5	06-1987	Moscatelli et al.		
	Q	EP 89101162.9	08/1989	Senoo et al.		

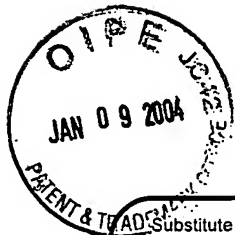
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Date
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2

of

2

Complete if Known

Application Number	10/605,456
Filing Date	September 30, 2003
First Named Inventor	Finkelstein, Seth
Art Unit	1632
Examiner Name	Not Yet Known
Attorney Docket Number	CBA-003.02

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	U	Barker et al., Neural transplantation therapies for Parkinson's and Huntington's Diseases, 2001, DDT, Vol. 6 pp. 575-582	
	V	Kmiec, Investigators have been searching for ways to add corrective genes to cells harboring defective genes..., 1999, AMERICAN SCIENTIST, Vol. 87, pp. 240-247	
	W	Daughaday et al., Insulin-like growth factors I and II. Peptide, messenger ribonucleic acid and gene structures, serum, and tissue concentrations, 1989, ENDOCRINE REVIEWS, Vol. 10, pp. 68-91	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE CITATION
IN AN APPLICATION
(Use several sheets if necessary)

Patent & Trademark Office
JAN 13 2003
JAN 09 2004

Docket Number (Optional)
CBA-003.01

Application Number
09/642,277

Applicant
Finklestein et al.

Filing Date
August 18, 2000

Group Art Unit
1636

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
B3	BW 5,817,773	Oct. 6, 1998	Wilson et al.	530	399		

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FOREIGN PATENT DOCUMENTS							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
B8	BX WO 97/34618	25 September 1997	PCT				
B8	BY WO 00 69448	23 November 2000	PCT				

		OTHER DOCUMENTS	(Including Author, Title, Date, Pertinent Pages Etc.)
B8	BZ	Dinsmore, J. et al., "Embryonic Stem Cells Differentiated In Vitro As A Novel Source Of Cells For Transplantation", Cell Transplantation USA 5(2): 131-143 (1996).	
B8	CA	Kennedy, T.E. et al., "Netrins Are Diffusible Chemotropic Factors For commissural Axons In The Embryonic Spinal Cord", Cell USA 78: 425-435 (August 1994).	
B8	CB	Marciniak, A. et al., "Neural Stem Cells, In Combination With Basic Fibro-Blast Growth Factor (bFGF), May Represent A Treatment For Stroke", Experimental Neurology 164(2): 444 (August 2000).	
B8	CC	Strömberg, M. et al., "Chronic Implants Of Chromaffin Tissue Into The Dopamine-Denervated Striatum. Effects of NGF On Graft Survival, Fiber Growth And Rotational Behavior", Exp Brain Res 60: 335-349 (1985).	
B8	CD	International Search Report, PCT Pub. No. WO 01/12236, filed August 18, 2000.	

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1645 1636

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
SSP	AA	5,175,103	Dec. 29, 1992	Lee et al.	435	172.3	Oct. 21, 1991
	AB	5,270,191	Dec 14, 1993	McKay et al.	435	172.3	May 12, 1992
	AC	5,733,871	March 31, 1998	Alps et al.	514	12	March 16, 1995
	AD	5,750,376	May 12, 1998	Weiss et al.	435	69.52	June 7, 1995
	AE	5,753,506	May 19, 1998	Johe	435	377	September 25, 1996
	AF	5,840,580	November 24, 1998	Terstappen et al.	435	372	May 14, 1997
	AG	5,914,108	June 22, 1999	Tsukamoto et al.	424	93.7	June 6, 1995
	AH	5,958,767	Sep. 28, 1999	Snyder et al.	435	368	Aug. 14, 1998
	AI	5,968,829	October 19, 1999	Carpenter	435	467	September 5, 1997

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
SSP	AJ	WO 94/03199	17 February 1994	PCT			
	AK	WO 95/24469	14 September 1995	PCT			
	AL	WO 96/15224	23 May 1996	PCT			
	AM	WO 00/00588	6 January 2000	PCT			

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages Etc.)

SSP	AN	Aebischer, P. et al., "Transplantation of Polymer Encapsulated Neurotransmitter Secreting Cells: Effect of the Encapsulation Technique", Journal of Biomechanical Engineering 113: 178-183 (May 1991).
	AO	Andersson, Candace et al., "Transplantation of Cultured Type 1 Astrocyte Cell Suspensions into Young, Adult and Aged Rat cortex: Cell Migration and Survival", Int. J. Devl. Neuroscience 11(5): 555-568 (1993).
	AP	Andsberg, Gunner ET al., "Amelioration of Ischaemia-Induced Neuronal Death in the Rat Striatum by NGF-Secreting Neural Stem Cells", European Journal of Neuroscience 10: 2026-2036 (1998).
	AQ	Bavetta, Seb et al., "The Effects of FK506 on Dorsal Column Axons Following Spinal Cord Injury in Adult Rats: Neuroprotection and Local Regeneration", Experimental Neurology 158: 382-393 (1999).
	AR	Bhatia, Mickie et al., "A Newly Discovered Class of Human Hematopoietic Cells with SCID-Repopulating Activity", Nature Medicine 4(9): 1038-1045 (September 1998).

Examiner: Sita Pappu

Date: 05/08/02

Form PTO-1449

INFORMATION DISCLOSURE STATEMENT
IN AN APPLICATION
(Use several sheets if necessary)

Docket Number (Optional)
CBA-003.01

Application Number
09/642,277

Applicant
Finklestein et al.

Filing Date
August 18, 2000

Group Art Unit
4645-1636

Chen, J. MD, et al., "Intracerebral Transplantation of Bone Marrow with BDNF after MCAo in Rat", Neuropharmacology 39: 711-716 (2000)

AS

AT

Lopez-Coviella, Ignacio et al., "Induction and Maintenance of the Neuronal Cholinergic Phenotype in the Central Nervous System by BMP-9", Science 289: 313-316 (14 July 2000).

AU

Cramer, Steven C., MD et al., "A Functional MRI Study of Subjects Recovered from Hemiparetic Stroke", Stroke 28: 2518-2527 (199&).

AV

Eglitis, Martin A. et al., "Hematopoietic Cells Differentiate into Both Microglia and Macrogia in the Brains of Adult Mice", Proc. Natl. Acad. Sci. USA 94: 4080-4085 (April 1997).

AW

Evans, M.J. et al., "Establishment in Culture of Pluripotential Cells from Mouse Embryos", Nature 292: 154-156 (9 July 1981).

AX

Fisher, Marc et al., "Delayed Treatment with Intravenous Basic Fibroblast Growth Factor Reduces Infarct Size Following Permanent Focal Cerebral Ischemia in Rats", Journal of Cerebral Blood Flow and Metabolism 15: 953-959 (1995).

AY

Flax, Jonathan D. et al., "Engraftable Human Neural Stem Cells Respond to Developmental Cues, Replace Neurons, and Express Foreign Genes", Nature Biotechnology 16(11): 1033-1039 (November 1998).

AZ

Gage, Fred H., "Survival and Differentiation of Adult Neuronal Progenitor Cells Transplanted to the Adult Brain", Proc. Natl. Acad. Sci. USA 92: 11879-11883 (December 1995).

BA

Griffith, Diana L. et al., "Three-Dimensional Structure of Recombinant Human Osteogenic Protein 1: Structural Paradigm for the Transforming Growth Factor β Superfamily", Proc. Natl. Acad. Sci. USA 93: 878-883 (January 1996).

BB

Jones, Theresa A. et al., "Use-Dependant Growth of Pyramidal Neurons after Neocortical Damage", Journal of Neuroscience 14(4): 2140-2152 (April 1994).

BC

Kawamata, Takakazu et al., "Intracisternal Antisense Oligonucleotide to Growth Associated Protein-43 Blocks the Recovery-Promoting Effects of Basic Fibroblast Growth Factor after Focal Stroke", Experimental Neurology 158: 89-96 (1999).

BD

Kawamata, Takakazu et al., "Intracisternal Basic Fibroblast Growth Factor (bFGF) Enhances Behavioral Recovery Following Focal Cerebral Infarction in the Rat", Journal of Cerebral Blood Flow and Metabolism 16: 542-547 (1996).

BE

Kawamata, Takakazu et al., "Intracisternal Basic Fibroblast Growth Factor Enhances Functional Recovery and Up-Regulates the Expression of a Molecular Marker of Neuronal Sprouting Following Focal Cerebral Infarction", Proc. Natl. Acad. Sci. USA 94: 8179-8184 (July 1997).

BF

Kuhn, H. Georg et al., "Epidermal Growth Factor and Fibroblast Growth Factor-2 Have Different Effects on Neural Progenitors in the Adult Rat Brain", Journal of Neuroscience 17(15): 5820-5829 (August 1, 1997).

BG

Ling, Zao Dung et al., "Differentiation of Mesencephalic Progenitor Cells into Dopaminergic Neurons by Cytokines", Experimental Neurology 149: 411-423 (1998).

BH

Lobsiger, Christian S. et al., "Platelet-Derived Growth Factor-BB Supports the Survival of Cultured Rat Schwann Cell Precursors in Synergy with Neurotrophin-3" GLIA 30: 290-300 (2000).

BI

Martin, Gail R., "Isolation of a Pluripotent Cell Line from Early Mouse Embryos Cultured in Medium Conditioned by Teratocarcinoma Stem Cells", Proc. Natl. Acad. Sci. USA 78(12): 7634-7638 (December 1981).

Form PTO-1449

**INFORMATION DISCLOSURE REPORT
IN AN APPLICATION**
(Use several sheets if necessary)

Docket Number (Optional)

CBA-003.01

Application Number

09/642,277

Applicant

Finklestein et al.

JAN 09 2004

Filing Date

August 18, 2000

Group Art Unit

1645-1636

Mehler, Mark F. et al., "Cytokine Regulation of Neuronal Differentiation of Hippocampal Progenitor Cells", Nature 362: 62-64 (4 March 1993).

Miraglia, Sheri et al., "A Novel Five-Transmembrane Hematopoietic Stem Cell Antigen: Isolation, Characterization and Molecular Cloning", Blood 90(12): 5013-5021 (December 15, 1997).

Park, Kook In et al., "Transplantation of Neural Progenitor and Stem Cells: Developmental Insights May Suggest New Therapies for Spinal Cord and Other CNS Dysfunction" Journal of Neurotrauma 16(8): 675-687 (1999).

Ray, Jasodhara et al., "A 10-Amino Acid Sequence of Fibroblast Growth Factor 2 is Sufficient for its Mitogenic Activity on Neural Progenitor Cells", Proc. Natl. Acad. Sci. USA 94: 7047-7052 (June 1997).

Ren, JingMei, et al., "Time Window of Intracisternal Osteogenic Protein-1 in Enhancing Functional Recovery after Stroke", Neuropharmacology 39: 860-865 (2000).

Snyder, Evan Y. et al., "Multipotent Neural Precursors can Differentiate Toward Replacement of Neurons Undergoing Targeted Apoptotic Degeneration in Adult Mouse Neocortex", Proc. Natl. Acad. Sci. USA 94: 11663-11668 (October 1997).

Stroemer, R. Paul PhD et al., "Enhanced Neocortical Neural Sprouting, Synaptogenesis, and Behavioral Recovery with D-Amphetamine Therapy after Neocortical Infarction in Rats", Stroke 29: 2381-2395 (1998).

Tamura, A. et al., "Focal Cerebral Ischaemia in the Rat: I. Description of Technique and Early Neuropathological Consequences Following Middle Cerebral Artery Occlusion", Journal of Cerebral Blood Flow and Metabolism 1: 53-60 (1981).

Thomson, James A. et al., "Embryonic Stem Cell Lines Derived from Human Blastocysts", Science 282: 1145-1147 (6 November 1998).

Van Vactor, David et al., "Neural Development: The Semantics of Axon Guidance", Current Biology 9: R201-R204 (1999).

Villa, Ana et al., "Establishment and Properties of a Growth Factor-Dependant, Perpetual Neural Stem Cell Line from the Human CNS", Experimental Neurology 161: 67-84 (2000).

Withers, G. S. et al., "Bone Morphogenetic Protein-7 Enhances Dendritic Growth and Receptivity to Innervation in Cultured Hippocampal Neurons", European Journal of Neuroscience 12: 106-116 (2000).

Yrjanheikki, Juha et al., "Tetracyclines Inhibit Microglial Activation and are Neuroprotective in Global Brain Ischemia", Proc. Natl. Acad. Sci. USA 95: 15769-15774 (December 1998).